

**In the Specification:**

Please replace the paragraph at page 15, lines 20-28, with the following amended paragraph:

One advantage of this detection scheme is that it may be relatively resistant to the accretion of material on the outer surface of the sensor ("biofouling"). One aspect of the invention provides for emission and absorption wavelengths through whatever over layer covers the sensor surface. The circuit may also be coated with a biocompatible optical translucent layer. Although close proximity of the target fluorophore to the sensor is desirable, significant leeway is obtained for detection of signals away from the site of sensor implantation. As discussed herein, one embodiment includes a time-released, tagged antibody or event-activated hybridization reaction. Continuous monitoring of the implanted sensor is possible so that kinetics of the reaction can also be assessed.